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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,332	01/10/2001	Song Hak Kim	GK0001	9127

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EXAMINER
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CLARK, SHEILA V

ART UNIT	PAPER NUMBER
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2815

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/758,332

**Applicant(s)**

KIM ET AL.

**Examiner**

S. V. Clark

**Art Unit**

2815



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 27-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 27-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/5, 8/10</u> . | 6) <input type="checkbox"/> Other: _____  |

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Claims 2-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims contain areas that lack clarity. A few examples are as follows.

In claim 2 it is unclear to what type of component the " gate" refers. A gate can have many definitions (a mechanical structure, a region of a transistor, etc.) and the invention identifies the " gate" as a component of a lead frame. This should be identified as such in the claims. The claims in for example 2 and 10 refer to a "normal lead frame". It is unclear what determines normal. If the applicant is referring to lead frame orientation then the type of orientation should be specifically identified for lead frames many have many orientations where none are considered no more normal than another. In claim 16 it is unclear how a die has a specific pattern and what is meant by "specific pattern" is being recited.

Clarity is suggested.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Matoba

Matoba shows in figure 14 a structure comprising a substrate comprising an unsymmetrical part 3 and a clamp 2 whereby the unsymmetrical part is visible through an observation hole shown at 21

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16, 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's prior art figures in view of Moon.

Applicant's prior art figures 9-14 and the admitted prior art in discussed in the disclosure on pages 1-10 show, discuss or suggest use of the various features recited in the claims except for the observation holes recited in claims 1 formed in an outer circumference of a window to set the gate of the lead frame. Moon shows a clamp 11, window 12A or 22A, lead frame 25 and gate hole 5. It would have been obvious to one having ordinary skill in this art to provide an observation hole in the clamp of the prior art to improve alignment in view of the teachings of Moon for Moon teaches use of said hole for the purpose of improving wire bonding and avoid misalignment of the die and lead frame.

The absence of a discussion of limiting the lead frame of the applicant's prior art and Moon is deemed to suggest use of conventional materials such as those recited in claims 5 and 6 which may be a plated layers.

Claims 3,4, 7, 8, 10, 12, 13, 14, 15, 16, 27, 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Moon.

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Moon shows a clamp 11, window 12A or 22A, lead frame 25 and gate hole 5 and die 6 whereby said clamp assembly is used for the purpose of improving wire bonding and avoid misalignment of the die and lead frame.

Claims 1-16, 27-30 are rejected.

Kotori, Pena et al, Wang et al, Asanasaves, and Ball et al are cited to show claims with window means.

Applicant's election of claims 3-16 in the reply filed on 8-10-2004 is acknowledged. Applicant relayed that he did not agree with what he felt was piecemeal prosecution receiving two differing restrictions. The first restriction was made by a different examiner and as these applications may change from examiner to examiner, each examiner may look at the examination of each application in a different manner. But as the applicant relayed that he did not agree with what he felt was piecemeal prosecution he failed to distinctly and specifically point out the supposed errors in the restriction requirement, therefore the election has been treated as an election without traverse (MPEP § 818.03(a)).

Any inquiry concerning this communication should be directed to S. V. Clark at telephone number (571) 272-1725.

  
S. V. Clark  
Primary Examiner  
Art Unit 2815

October 31, 2004